Occupational Separations

New Method for Measuring Job Openings

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Projections Overview

- Produced by the States in partnership with the Employment and Training Administration (ETA) and the Bureau of Labor Statistics (BLS)
- Produce Industry and Occupational employment projections
- Short-term (2-year) projections for the State on an annual basis (ETA deliverable Feb. 28)
- Long-term (10-year) projections for the State every two years (ETA deliverable June 30)
- Long-term (10-year) projections for sub-state areas every two years (completed within 2 yr. Long-term cycle)



Job Openings

- Job Openings measure opportunities to enter an occupation for individuals not currently employed in that occupation
- Opportunities arise because of:
 - 1. growth in the occupation
 - 2. workers permanently leaving and needing to be replaced
- BLS Calculates replacement rates and California applies those rates to their state and sub-state projections



Job Openings History

- BLS has used several methods over the past 50 years to measure job openings
- The current Replacements method was developed in the 1990s
- BLS research has identified statistical and methodological limitations to this method



Current Method: Replacements

 Cohort method: differentiates between employment estimates for occupations per age cohort at two points in time

Registered Nurses			
Year	2007	2012	
Age Cohort	20-24	25-29	
Jobs (in thousands)	31	56	

Net Change, 2007-2012: 25,000

Rate of Change, 2007-2012: 79.8%



New Method: Separations

- Uses longitudinal aspects of Current Population Survey (CPS) monthly survey data to estimate labor force exits and occupational transfers
 - ➤ CPS Annual Social and Economic Supplement (ASEC) asks individual respondents about labor force activity in the previous calendar year
 - > Demographic variables: age, sex, education, unemployment rate
- Regression models estimate projected rates of separations for each occupation
- Projections of separations are combined with employment projections to produce job openings



Reason for Change

More clarity about what is being measured

New method provides estimates labor force exits and transfers

More robust method

- Incorporates demographic characteristics to project separations
- Better accounts for future growth or declines

More reliable results

- Review of old method identified potential for undercounting of occupational separations
- User feedback confirmed that results were low, particularly noticeable at the state and local level



Replacements vs. Separations

Test Results

California 2014-2024 Projected Job Openings

Total, All Occupations (00-0000)

Current Method: Replacements		
Replacement Rate, 2014-2024	Replacement Needs, 2014-2024	
23.1%	3,962,200	

New Method: Separations				
Occupational	Labor Force Exit	Occupational	Occupational	
Transfer Rate,	Rate,	Separation Rate,	Separations,	
2014-2024	2014-2024	2014-2024	2014-2024	
63.6%	53.8%	117.3%	20,102,042	



What Changed?

- Both the replacements method and the separations method measure the same concept
- Differences in results are caused by changes in:
 - Methods
 - > Assumptions



Assumption Changes

- Replacement method assumes a more traditional career path
 - Enter occupation at a young age
 - Work the same occupation for many years
 - > Retire/promoted and replaced by a younger worker
- Separation method better accounts for job movement that doesn't follow a traditional career path



How to Interpret the Data

- Increase in openings is not due to a change/shift in the economy (i.e. baby-boomers retiring)
- Rate of openings higher than originally estimated -replacement method undercounted the amount of labor market movement



Separations vs. Replacements

Comparison -Total Openings Rank

Separations – Total Openings Rank		
Occupational Title	Openings	
Personal Care Aides	1,060,781	
Combined Food Preparation and Serving Workers, Including Fast Food	802,134	
Cashiers	771,358	
Retail Salespersons	726,730	
Waiters and Waitresses	603,652	
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	479,775	
Laborers and Freight, Stock, and Material Movers, Hand	469,813	
Office Clerks, General	421,295	
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	337,600	
Stock Clerks and Order Fillers	320,953	

Replacements – Total Openings Rank		
Occupational Title	Openings	
Personal Care Aides	230,490	
Combined Food Preparation and Serving Workers, Including Fast Food	209,583	
Retail Salespersons	194,220	
Cashiers	192,018	
Waiters and Waitresses	184,519	
Laborers and Freight, Stock, and Material Movers, Hand	133,326	
General and Operations Managers	109,559	
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	105,921	
Registered Nurses	104,609	
Office Clerks, General	103,342	



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What to Expect...

- Current projections (2014-2024) uses the Replacements Methodology
- New Separation Methodology will first be implemented on the 2017-2019 Short-Term Projections
 - ➤ Short-Term 2017-2019 CA publication: 2018 1st quarter
 - ➤ Long-Term 2016-2026 CA publication: 2018 3rd quarter
 - ➤ Long-Term 2016-2026 sub-state publication: 2019 1st quarter



Questions?

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